APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/824,706	04/04/2001	Yatin R. Acharya	95-391	1771

20736	7590	04/13/2004		EXAMINER
MANELLI DENISON & SELTER				KNOLL, CLIFFORD H
2000 M STREET NW SUITE 700				
WASHINGTON, DC 20036-3307			ART UNIT	PAPER NUMBER
			2112	

DATE MAILED: 04/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 January 2004*.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-12* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-12* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

This action is responsive to communication of 1/30/04. Claims 11-12 have been

introduced. Claims 1-12 are currently pending in this Office Action.

The text of those sections of Title 35, U.S. Code not included in this action can

be found in a prior Office action.

Claim Rejections - 35 USC § 112

Claims 1 and 8 are rejected under 35 U.S.C. 112, second paragraph, as being

indefinite for failing to particularly point out and distinctly claim the subject matter which

applicant regards as the invention.

The recitation of "a corresponding packet" does not clearly establish the nature of

correspondence. Amendment has largely overcome the indefiniteness rejection; by

amending to recite "said *packets* having been *transmitted*" and "said each access

cycle" the correspondence has been established sufficiently to allow recitation of

"transmission of *the* corresponding packet" as originally claimed. This suggestion is

suggested for both claim 1, and claim 8, in which "said packets having been

transmitted" likewise establishes a correspondence which can be clearly referred to.

Claim Rejections - 35 USC § 102

Claims 1-10 stand rejected and claims 11 and 12 are newly rejected under 35

U.S.C. 102(e) as being anticipated by Fung (US 6243778).

Regarding claim 1, Fung discloses storing in a table each access cycle by a

retransmission manager entries identifying respective packets having been transmitted

during the corresponding access cycle according to a service protocol requiring an

acknowledgement receipt within a prescribed time interval (e.g., col.10, lines 66-67),

resetting an acknowledgement waiting bit for a selected one of the entries by an

acknowledgement manager (e.g., col.11, lines 9-12), and transferring the entries having

a determined absence of the reset stored acknowledgement waiting bit upon expiration

of the prescribed time interval to a transmit queue for retransmission (e.g., col.11, lines

4-5).

Regarding claim 2, Fung also discloses counting during each access cycle a

number of the packets having been transmitted during the corresponding access cycle

(col.11, lines 6-8).

Regarding claim 3, Fung further discloses accessing the entry for the first of the

packets transmitted during an access cycle having passed the expiration of the

prescribed time interval and determining whether the accessed entry includes a reset

acknowledgement waiting bit (e.g., col.11, lines 3-5).

Regarding claim 4, Fung still further discloses transferring the accessed entry

and selected subsequent entries based on the counted number stored in the accessed

entry to the transmit queue, independent of whether the selected subsequent entries

have respective reset acknowledgement waiting bits (e.g., col.11, lines 52-64).

Regarding claim 5, Fung still further discloses deleting entries having passed

beyond the expiration of the prescribed time interval (e.g., col.17, lines 41-50).

Regarding claim 6, Fung further discloses identifying entries for transfer based on the counted number stored in the entry (e.g., col.11, lines 4-5).

Regarding claim 7, Fung also discloses wherein each access cycle is defined by a prescribed number of clock cycles (e.g., col.10, lines 66-67).

Regarding claim 8, Fung discloses a table configured for storing entries identifying respective packets having been transmitted according to a service protocol requiring an acknowledgement message receipt within a prescribed time interval and an acknowledgement waiting bit (e.g., col.11, lines 9-12), a transmit queue (e.g., col.10, lines 63-65), an acknowledgement manager configured for resetting the acknowledgement waiting bit for a selected one of the entries (e.g., col.11, lines 4-5), the retransmission manager configured for storing in the table each access cycle the entries identifying the respective packets having been transmitted during the corresponding access cycle, and transferring the entries having a determined absence of the reset acknowledgement bit upon expiration of the prescribed time interval from the table to the transmit queue (e.g., col.17, lines 41-50).

Regarding claim 9, Fung also discloses comprising a counter configured for counting during each access cycle a number of the packets having been transmitted during the corresponding access cycle according to the service protocol (e.g., col.11, lines 4-5), inserting the counted number into a number of packets field within the entry corresponding to a first of the packets transmitted during the corresponding access cycle (e.g., col.11, lines 6-14).

Regarding claim 10, Fung further discloses accessing the entry for the first of the

packets having been transmitted during an access cycle having passed the expiration of

the prescribed interval, the retransmission manager transferring the accessed entry and

selected subsequent entries based on the counted number stored in the accessed entry

and identifying that the corresponding acknowledgement waiting bit has not been reset

(e.g., col.11, lines 1-12).

Regarding claims 11 and 12, Fung further discloses the storing into the table

after the defined prescribed number of clock cycles (e.g., col. 14, lines 35-39, "delay")

Therefore, Fung discloses the claimed invention.

Response to Arguments

Applicant's arguments filed 1/30/04 have been fully considered but they are not

persuasive.

Applicant's amendments have overcome rejection under 35 USC 112, but

amendment has introduced a minor indefiniteness which has created a new rationale for

rejecting claim 1; the correction suggested above, if acceptable to Applicant is sufficient

to overcome this rejection.

Regarding claims 1 and 8, Applicant argues that Fung fails to disclose "the

claimed features of storing, each access cycle, a plurality of entries that identify

respective packets, wherein the packets have been transmitted during said each access

cycle according to a service protocol requiring an acknowledgement message receipt within a prescribed time interval" (p. 9, emphasis in original); however a proper interpretation of Fung discloses all of these features. For every access cycle, Fung's transaction interface stores an entry to identify respective packets. This is clear from the cited passage which teaches associating a hardware timer with each transaction. Also cited, Fung teaches that if the transmission is not successful "the Transaction Interface 210 will attempt to send the data again" (col. 11, lines 4-5); only by storing an entry can the transaction interface retransmit the data (e.g., col. 10, lines 56-58, "queue"). These passage also make clear that packets are transmitted during each access cycle. Applicant argues that Fung "merely discloses a timer used to track a transaction timeout" (p. 9); however this teaching is no *mere* teaching, for the timer teaches the prescribed time interval of the claimed invention. Fung teaches a number of retries if the transmission is unsuccessful; however this is responsive to the timer which determines when the transaction times out and a retry becomes necessary. It is not clear how the claims are intended to be distinguished from this disclosure, which the cited passages make clear.

Applicant argues that Fung does not disclose "the concept of an access cycle, as claimed, where entries are stored in groups based on a given access cycle; however it is not clear what recitation serves to distinguish any group as distinct from any other group. If Applicant is referring to "according to a service protocol requiring an acknowledgement", it is clear that Fung shows that when a task desires "to send data to a node other than the one that they are on [then they] send the data through a

transmitting portion of the Transaction Interface" (col. 10, lines 51-53); a forteriori, Fung

teaches *different, multiple* service protocols (e.g., col. 10, lines 53-58, "time-critical or

non-time critical queue as desired").

For these reasons, the rejection of claims 1-10 using Fung, is maintained supra.

Fung was also deemed anticipatory of newly recited claims 11-12.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Clifford H Knoll whose telephone number is 703-305-

8656. The examiner can normally be reached on M-F 0630-1500.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Mark H Rinehart can be reached on 703-305-4815. The fax phone number

for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

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you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

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